INDEX TO AUTHORS

A

Anderson, Ernest, and **Kinsman, Simon.** Studies on the hemicelluloses. II. The composition of the hemicellulose from cottonseed hulls, 39

Anderson, R. J. See BURT and ANDERSON, 451

—. See PANGBORN and ANDERSON, 465

—. See UYEI and ANDERSON, 653

Avery, B. F., and **Hastings, A. Baird.** A gasometric method for the determination of lactic acid in the blood, 273

B

Baker, Reginald W. See BEARD, BAKER, and MYERS, 123

Bakwin, Harry. See BODANSKY, BAKWIN, and BAKWIN, 551

Bakwin, Ruth Morris. See BODANSKY, BAKWIN, and BAKWIN, 551

Barnes, Broda O. See BEARD and BARNES, 49

—. See MYERS, BEARD, and BARNES, 117

Baumann, Emil J., Kurland, Sarah, and **Metzger, Nannette.** Mineral metabolism during involution of simple goiter, 383

Beard, Howard H. Studies in the nutritional anemia of the rat. VI. The effect of inorganic elements upon the rate of blood regeneration and growth, 135

—, **Baker, Reginald W.,** and **Myers, Victor C.** Studies in the nutritional anemia of the rat. V. The action of iron and iron supplemented with other elements upon the daily reticulocyte, erythrocyte, and hemoglobin response, 123

— and **Barnes, Broda O.** The influence of feeding proteins, amino acids, and related substances upon creatine-creatinine metabolism, 49

— and **Myers, Victor C.** Studies in the nutritional anemia of the rat. I. Influence of iron upon blood regeneration, 71

—, **Rafferty, Catherine,** and **Myers, Victor C.** Studies in the nutritional anemia of the rat. III. The prevention of anemia by means of inorganic elements, 111

—. See MYERS and BEARD, 89

—. See MYERS, BEARD, and BARNES, 117

Benjamin, H. R. See HESS, BENJAMIN, and GROSS, 1

Berg, Clarence P., and **Potgieter, Martha.** Tryptophane metabolism. II. The growth-promoting ability of *dl*-tryptophane, 661

Berliner, Frieda S. See HESS, BERLINER, and WEINSTOCK, 9

Bills, Charles E. See MASSENGALE, BILLS, and PRICKETT, 213

Block, Richard J. The basic amino acids from neurokeratin: Is neurokeratin a true keratin? 647

—, **Cowgill, George R.**, and **Klotz, Benjamin Howard.** The antineuritic vitamin. I. The method of assay, concentration of the vitamin with silver under various conditions, and its solubility in certain organic solvents, 765

Bodansky, Oscar, Bakwin, Ruth Morris, and **Bakwin, Harry.** The distribution of phosphatase in the tissues of teleosts and elasmobranchs, 551

Bogert, L. Jean, and **Hastings, A. Baird.** The calcium salts of bone, 473

Booher, Lela E., and **Hansmann, G. H.** Studies on the chemical composition of the human skeleton. I. Calcification of the tibia of the normal new born infant, 195

Brown, K. E. See DUNN, SMART, REDEMANN, and BROWN, 599

Burt, Marie Louise, and **Anderson, R. J.** The chemistry of the lipoids of tubercle bacilli. XXIV. Analysis of the acetone-soluble fat of the bovine tubercle bacillus, 451

C

Calvery, Herbert O. Studies on crystallized egg albumin, 613

— and **White, Abraham.** Vitellin of hen's egg, 635

Catherwood, Florence L. See WINDUS, CATHERWOOD, and ROSE, 173

Cerecedo, Leopold R. See FREUDENBERG and CERECEDO, 207

Chambers, William H. See DANN, CHAMBERS, and LUSK, 511

Clarke, H. T., and **Inouye, J. M.** The alkaline deamination of derivatives of cysteine, 541

Cole, Versa V., and **Koch, Fred C.** A study on the phosphorus distribution in rat striated muscle as influenced by age, diet, and irradiated ergosterol, 263

Conant, James B. See WRIGHT, CONANT, and KAMERLING, 411

Cook, Charles A. See VICKERY and COOK, 393

Cori, Carl F., and **Cori, Gerty T.** The influence of epinephrine and insulin injections on hexosephosphate content of muscle, 581

—. See CORI and CORI, 561

Cori, Gerty T., and **Cori, Carl F.** A method for the determination of hexosemonophosphate in muscle, 561

—. See CORI and CORI, 581

Cowgill, George R. See BLOCK, COWGILL, and KLOTZ, 765

Cretcher, Leonard W. See NELSON and CRETCHER, 147

D

Dann, Margaret, Chambers, William H., and **Lusk, Graham.** Animal calorimetry. XLI. The influence of phlorhizin glycosuria on the metabolism of dogs after thyroidectomy, 511

Degering, Edward F., and **Upson, Fred W.** Catalytic oxidation of *d*-glucose and related sugars by oxygen in the presence of iron pyrophosphates, 423

Dorcas, M. J. See SUPPLEE, DORCAS, and HESS, 749

Dunn, Max S., Smart, B. W., Redemann, C. E., and **Brown, K. E.** A new synthesis of glutamic acid, 599

Dupré, Ernest F., and **Semeonoff, Eugenia.** Two factors influencing the serum calcium and inorganic phosphate of the rabbit. I. The influence of diet. II. Diurnal variation, 341

E

Ellis, Ruth H., and **Rose, William C.** Feeding experiments with mixtures of highly purified amino acids. II. The supplementing effect of proteins, 167

Embden, Gustav. Micro determination of ammonia in the muscles of the frog, 315

Evenden, James. See DANN, CHAMBERS, and LUSK, 511

Evvard, John M. See LAMB and EVVARD, 415

F

Fitch, Alice. See DU VIGNEAUD, FITCH, PEKAREK, and LOCKWOOD, 233

Freudenberg, Werner, and **Cerecedo, Leopold R.** Studies on the antineuritic vitamin. I. On the use of albino mice as test animals for determining the potency of antineuritic concentrates, 207

G

Gallup, Willis D., and **Reder, Ruth.** Studies on the toxicity of gossypol. II. The effect of gossypol upon the apparent digestibility of protein, fat, and carbohydrate and upon the absorption of glucose from the gastrointestinal tract of the rat, 221

Glick, David, and **King, C. G.** Relationships between the structure of saturated aliphatic alcohols and their inhibiting effect upon liver esterase, 497

Grant, Gordon A. See HARDING and GRANT, 529

Greenberg, David M., and **Greenberg, Max.** Ultrafiltration. I. Ultrafiltration of electrolytes from alkali caseinate solutions, 373

Greenberg, Max. See GREENBERG and GREENBERG, 373

Greene, Carl H. See POWER and GREENE, 281, 295

Gross, J. See HESS, BENJAMIN, and GROSS, 1

Guest, George Martin. A pipette for the handling of whole blood samples, for use with the Van Slyke gasometric apparatus, 507

H

Hansmann, G. H. See BOOHER and HANSMANN, 195

Harding, Victor John, and **Grant, Gordon A.** The estimation of galactose in blood and urine, 529

Harkins, Henry N. See HASTINGS, HARKINS, and LIU, 681

Hastings, A. Baird, Harkins, Henry N., and **Liu, S. K.** Blood and urine studies following bromide injection, 681

—. See AVERY and HASTINGS, 273

—. See BOGERT and HASTINGS, 473

Hess, Alfred F., Benjamin, H. R., and **Gross, J.** The source of excess calcium in hypercalcemia induced by irradiated ergosterol, 1

Hess, Alfred F., Berliner, Frieda S., and **Weinstock, Mildred.** An investigation of the comparative ash content of the metaphyses and shafts of bones, 9

—. See SUPPLEE, DORCAS, and HESS, 749

Hollander, Leonore, and **du Vigneaud, Vincent.** The resolution of inactive cystine and isolation of pure dextrorotatory cystine, 243

Howe, Marion. See WEST and HOWE, 611

I

Inouye, J. M. See CLARKE and INOUYE, 541

K

Kamerling, S. E. See WRIGHT, CONANT, and KAMERLING, 411

Kemmerer, A. R., and **Todd, W. R.** The effect of diet on the manganese content of milk, 317

Kiech, Veon Carter, and **Luck, James Murray.** Amino acid metabolism. I. The relative rates of amino acid disappearance and urea formation, 433

King, C. G. See GLICK and KING, 497

—. See SMITH and KING, 491

—. See SVIRBELY and KING, 483

Kinsman, Simon. See ANDERSON and KINSMAN, 39

Kirk, J. Stanley, and **Sumner, James B.** Antiurease, 21

Klotz, Benjamin Howard. See BLOCK, COWGILL, and KLOTZ, 765

Koch, Fred C. See COLE and KOCH, 263

Kurland, Sarah. See BAUMANN, KURLAND, and METZGER, 383

L

Lamb, Alvin R., and **Evvard, John M.** The acid-base balance in animal nutrition. IV. The effect of long continued ingestion of acid on reproduction in swine, rats, and rabbits, 415

Larson, Hardy W. A colorimetric method for the determination of allantoin, 727

Levene, P. A., and **Tipson, R. Stuart.** The ring structure of adenosine, 809

— and **Walti, A.** Configurational relationship of α-hydroxyheptanoic acid to other α-hydroxy acids, 593

— and —. On the configurational relationship of the carbinols of the isobutyl series and of ethylbenzylcarbinol to the simple aliphatic carbinols, 367

— and —. Phytochemical reductions. The configurations of glycols obtained by reduction with fermenting yeast, 361

— and —. Studies in polymerization and condensation. VII. Polymerization of the α-hydroxyaldehydes, 353

Lewis, Howard B. See LOUGH and LEWIS, 739

Link, Karl Paul, and **Nedden, Raymond.** Improvements in the preparation of *d*-galacturonic acid, 307

Liu, S. K. See HASTINGS, HARKINS, and LIU, 681

Lockwood, W. Wayne. See DU VIGNEAUD, FITCH, PEKAREK, and LOCKWOOD, 233

Lough, S. Allan, and **Lewis, Howard B.** The metabolism of sulfur. XVIII. The distribution of urinary sulfur in the rabbit after the administration of monobromobenzene, 739

Luck, James Murray. See KIECH and LUCK, 433

Lusk, Graham. See DANN, CHAMBERS, and LUSK, 511

M

Massengale, O. N., Bills, Charles E., and **Prickett, Paul S.** Factors determining the ergosterol content of yeast. II. Carbohydrate sources, 213

McCann, D. C. See OLCOTT and MCCANN, 185

Metzger, Nannette. See BAUMANN, KURLAND, and METZGER, 383

Meyer, Curtis E. See DU VIGNEAUD and MEYER, 641

Michaelis, L., and **Smythe, C. V.** The correlation between rate of oxidation and potential in iron systems, 329

Myers, Victor C., and **Beard, Howard H.** Studies in the nutritional anemia of the rat. II. Influence of iron plus supplements of other inorganic elements upon blood regeneration, 89

—, —, and **Barnes, Broda O.** Studies in the nutritional anemia of the rat. IV. The production of hemoglobinemia and polycythemia in normal animals by means of inorganic elements, 117

—. See BEARD, BAKER, and MYERS, 123

—. See BEARD and MYERS, 71

—. See BEARD, RAFFERTY, and MYERS, 111

N

Nash, Thomas P., Jr., and **Williams, Edward F., Jr.** Is blood protein amide nitrogen a source of urinary ammonia? 783

Nedden, Raymond. See LINK and NEDDEN, 307

Nelson, William L., and **Cretcher, Leonard H.** The carbohydrate acid sulfate of *Macrocystis pyrifera,* 147

O

Olcott, H. S., and **McCann, D. C.** Carotenase. The transformation of carotene to vitamin A *in vitro,* 185

P

Pangborn, Mary C., and **Anderson, R. J.** The chemistry of the lipoids of tubercle bacilli. XXV. The composition of the phosphatide fraction of the timothy bacillus, 465

Pekarek, E. See DU VIGNEAUD, FITCH, PEKAREK, and LOCKWOOD, 233

Potgieter, Martha. See BERG and POTGIETER, 661

Power, Marschelle H., and **Greene, Carl H.** The nature of the blood sugar as shown by a comparision of the optical rotation and the reducing power of the *in vivo* dialysate, 295

— and —. The state of the blood sugar as shown by compensation dialysis *in vivo,* 281

Prickett, Paul S. See MASSENGALE, BILLS, and PRICKETT, 213

R

Rafferty, Catherine. See BEARD, RAFFERTY, and MYERS, 111

Redemann, C. E. See DUNN, SMART, REDEMANN, and BROWN, 599

Reder, Ruth. See GALLUP and REDER, 221

Rose, William C. Feeding experiments with mixtures of highly purified amino acids. I. The inadequacy of diets containing nineteen amino acids, 155

—. See ELLIS and ROSE, 167

—. See WINDUS, CATHERWOOD, and ROSE, 173

S

Sahyun, Melville. On the carbohydrates of muscle, 253

—. On the carbohydrates of the muscles of the frog (*Rana pipiens*), 29

Sando, Charles E. The plant coloring matter, robinin, 675

Semeonoff, Eugenia. See Dupré and Semeonoff, 341

Shaffer, Philip A. See Urban and Shaffer, 697

Simonsen, Daisy G. The action of mercuric salts on cystine, 323

Smart, B. W. See Dunn, Smart, Redemann, and Brown, 599

Smith, Frederick L., 2nd, and **King, C. G.** The preparation and storage of vitamin C concentrates from lemon juice, 491

Smythe, C. V. See Michaelis and Smythe, 329

Sumner, James B. See Kirk and Sumner, 21

Supplee, G. C., Dorcas, M. J., and **Hess, Alfred F.** Irradiated milk: the energy requirements for antirachitic activation, 749

Svirbely, Joseph L., and **King, C. G.** The preparation of vitamin C concentrates from lemon juice, 483

T

Todd, W. R. See Kemmerer and Todd, 317

Tipson, R. Stuart. See Levene and Tipson, 809

U

Upson, Fred W. See Degering and Upson, 423

Urban, Frank, and **Shaffer, Philip A.** The acidic property of sugars, 697

Uyei, Nao, and **Anderson, R. J.** The chemistry of the lipoids of tubercle bacilli. XXVI. Separation of the lipoid fractions from the leprosy bacillus, 653

V

Vickery, Hubert Bradford, and **Cook, Charles A.** The preparation of crystalline ornithine. The picrates and monosulfates of ornithine, 393

du Vigneaud, Vincent, Fitch, Alice, Pekarek, E., and **Lockwood, W. Wayne.** The inactivation of crystalline insulin by cysteine and glutathione, 233

— and **Meyer, Curtis E.** Isolation of methionine by enzymatic hydrolysis, 641

—. See Hollander and du Vigneaud, 243

W

Walti, A. See Levene and Walti, 353, 361, 367, 593

Weinstock, Mildred. See Hess, Berliner, and Weinstock, 9

Wendel, William B. The determination of pyruvic acid and the preparation of lithium pyruvate, 717

West, Randolph, and **Howe, Marion.** A crystalline derivative of an acid present in liver. A correction, 611

White, Abraham. See CALVERY and WHITE, 635

Williams, Edward F., Jr. See NASH and WILLIAMS, 783

Windus, Wallace, Catherwood, Florence L., and **Rose, William C.** Feeding experiments with mixtures of highly purified amino acids. III. The supplementing effect of casein fractions, 173

Wright, G. Payling, Conant, James B., and **Kamerling, S. E.** The catalytic effect of ferricyanide in the oxidation of unsaturated compounds by oxygen, 411

Y

Yasuda, Morio. The determination of the iodine number of lipids, 401

INDEX TO SUBJECTS

A

Absorption:
Glucose, gastrointestinal tract, gossypol effect (Gallup and Reder) 221

Acetone:
-Soluble fat, tubercle bacillus, bovine (Burt and Anderson) 451

Acid:
Ingestion, reproduction effect (Lamb and Evvard) 415
Liver, crystalline derivative (West and Howe) 611

Acid-base:
Balance, nutrition. IV (Lamb and Evvard) 415

Adenosine:
Chemical constitution (Levene and Tipson) 809

Age:
Muscle, striated, phosphorus distribution, influence (Cole and Koch) 263
Phosphorus distribution, muscle, striated, influence (Cole and Koch) 263

Albumin:
Egg, crystallized (Calvery) 613

Alcohols:
Aliphatic, saturated, chemical constitution, and liver esterase, inhibiting effect, relation (Glick and King) 497

Aldehydes:
α-Hydroxy-, polymerization (Levene and Walti) 353

Allantoin:
Determination, colorimetric (Larson) 727

Amide nitrogen:
Blood protein, urine ammonia source (Nash and Williams) 783

Amino acid(s):
Basic, neurokeratin (Block) 647
Creatine-creatinine metabolism, effect (Beard and Barnes) 49
Diet inadequacy (Rose) 155
— —, casein fractions, supplement (Windus, Catherwood, and Rose) 173
— —, protein supplement (Ellis and Rose) 167
Disappearance and urea formation, relative rates (Kiech and Luck) 433

Amino acid(s)—*continued:*
Feeding, purified. I (ROSE) 155
II (ELLIS and ROSE) 167
III (WINDUS, CATHERWOOD, and ROSE) 173
Metabolism. I (KIECH and LUCK) 433
Ammonia:
Determination, micro, muscle, frog (EMBDEN) 315
Muscle, frog, determination, micro (EMBDEN) 315
Urine, blood protein amide nitrogen source (NASH and WILLIAMS) 783
Anemia:
Nutritional. I (BEARD and MYERS) 71
II (MYERS and BEARD) 89
III (BEARD, RAFFERTY, and MYERS) 111
IV (MYERS, BEARD, and BARNES) 117
V (BEARD, BAKER, and MYERS) 123
VI (BEARD) 135
—, blood regeneration, iron effect (BEARD and MYERS) 71
—, — —, — plus inorganic elements, effect (MYERS and BEARD) 89
—, inorganic elements as preventive (BEARD, RAFFERTY, and MYERS) 111
Anemia—*continued:*
Nutritional, inorganic elements, blood regeneration, effect (BEARD) 135
—, — —, growth effect (BEARD) 135
—, iron plus supplements, action (BEARD, BAKER, and MYERS) 123
Antiurease:
(KIRK and SUMNER) 21
Apparatus:
Pipette, blood, Van Slyke gasometric apparatus (GUEST) 507
Van Slyke gasometric, pipette, blood (GUEST) 507
Ash:
Bone shafts (HESS, BERLINER, and WEINSTOCK) 9
Metaphyses (HESS, BERLINER, and WEINSTOCK) 9

B

Bacillus:
Leprosy, lipoids, separation (UYEI and ANDERSON) 653
Benzene:
Monobromo-, urine sulfur, effect (LOUGH and LEWIS) 739
Blood:
Bromide injection effect (HASTINGS, HARKINS, and LIU) 681
Galactose determination (HARDING and GRANT) 529

Blood—*continued:*
Lactic acid determination, gasometric (AVERY and HASTINGS) 273
Protein amide nitrogen, urine ammonia source (NASH and WILLIAMS) 783
Regeneration, anemia, nutritional, inorganic elements effect (BEARD) 135
—, —, —, iron effect (BEARD and MYERS) 71
—, —, —, — plus inorganic elements, effect (MYERS and BEARD) 89
Sugar, nature (POWER and GREENE) 295
—, state (POWER and GREENE) 281
Blood cell:
Red, anemia, nutritional, iron plus supplements, action (BEARD, BAKER, and MYERS) 123
See also Reticulocyte.
Blood serum:
Calcium, diet influence (DUPRÉ and SEMEONOFF) 341
—, diurnal variation (DUPRÉ and SEMEONOFF) 341
Phosphate, inorganic, diet influence (DUPRÉ and SEMEONOFF) 341
—, —, diurnal variation (DUPRÉ and SEMEONOFF) 341
Bone:
Ash (HESS, BERLINER, and WEINSTOCK) 9
Calcium salts (BOGERT and HASTINGS) 473
See also Tibia.
Bromide:
Blood composition, injection effect (HASTINGS, HARKINS, and LIU) 681
Urine composition, injection effect (HASTINGS, HARKINS, and LIU) 681

C

Calcification:
Tibia, new-born (BOOHER and HANSMANN) 195
Calcium:
Blood serum, diet effect (DUPRÉ and SEMEONOFF) 341
— —, diurnal variation (DUPRÉ and SEMEONOFF) 341
Hypercalcemia, ergosterol, irradiated, source (HESS, BENJAMIN, and GROSS) 1
Calcium salts:
Bone (BOGERT and HASTINGS) 473
Calorimetry:
Animal. XLI (DANN, CHAMBERS, and LUSK) 511
Carbinol(s):
Ethylbenzyl-, carbinols, aliphatic, simple, configurational relationship (LEVENE and WALTI) 367
Isobutyl and aliphatic, simple, configurational relationship (LEVENE and WALTI) 367

Carbohydrate(s):
Acid sulfate, *Macrocystis pyrifera* (NELSON and CRETCHER) 147
Digestibility, gossypol effect (GALLUP and REDER) 221
Muscle (SAHYUN) 253
—, frog (SAHYUN) 29
Yeast, ergosterol content (MASSENGALE, BILLS, and PRICKETT) 213
Carotenase:
(OLCOTT and MCCANN) 185
Carotene:
Vitamin A, transformation *in vitro* (OLCOTT and MCCANN) 185
Casein:
Fractions, amino acid diet inadequacy, supplement (WINDUS, CATHERWOOD, and ROSE) 173
Catalysis:
Ferricyanide, oxidation, unsaturated compounds (WRIGHT, CONANT, and KAMERLING) 411
Iron pyrophosphates, *d*-glucose and related sugars, oxidation (DEGERING and UPSON) 423
Chemical constitution:
Adenosine (LEVENE and TIPSON) 809
Alcohols, aliphatic, saturated, and liver esterase, inhibiting effect, relation (GLICK and KING) 497
Chemical constitution—*continued:*
Carbinol, ethylbenzyl-, carbinols, aliphatic, simple, relation (LEVENE and WALTI) 367
Carbinols, isobutyl series, carbinols, aliphatic, simple, relation (LEVENE and WALTI) 367
Glycols, from reduction with fermenting yeast (LEVENE and WALTI) 361
α-Hydroxy acids, α-hydroxyheptanoic acid, relation (LEVENE and WALTI) 593
α-Hydroxyheptanoic acid, α-hydroxy acids, relation (LEVENE and WALTI) 593
Condensation:
Polymerization and. VII (LEVENE and WALTI) 353
Cottonseed:
Hulls, hemicellulose (ANDERSON and KINSMAN) 39
Creatine:
-Creatinine metabolism, amino acid effect (BEARD and BARNES) 49
— —, protein effect (BEARD and BARNES) 49
Cysteine:
Derivatives, deamination, alkaline (CLARKE and INOUYE) 541
Insulin, crystalline, inactivation (DU VIGNEAUD, FITCH, PEKAREK, and LOCKWOOD) 233

Cystine:
Mercuric salts action (SIMONSEN) 323
***d*-Cystine:**
Isolation, pure (HOLLANDER and DU VIGNEAUD) 243
***i*-Cystine:**
Resolution (HOLLANDER and DU VIGNEAUD) 243

D

Diet:
Amino acids, inadequacy (ROSE) 155
— —, —, casein fractions, supplement (WINDUS, CATHERWOOD, and ROSE) 173
— —, —, protein supplement (ELLIS and ROSE) 167
Blood serum calcium, influence (DUPRÉ and SEMEONOFF) 341
— — phosphate, inorganic, influence (DUPRÉ and SEMEONOFF) 341
Calcium, blood serum, influence (DUPRÉ and SEMEONOFF) 341
Manganese in milk, effect (KEMMERER and TODD) 317
Muscle, striated, phosphorus distribution, influence (COLE and KOCH) 263
Phosphate, inorganic, blood serum, influence (DUPRÉ and SEMEONOFF) 341
Diet—*continued:*
Phosphorus distribution, muscle, striated, influence (COLE and KOCH) 263
Digestibility:
Carbohydrate, gossypol effect (GALLUP and REDER) 221
Fat, gossypol effect (GALLUP and REDER) 221
Protein, gossypol effect (GALLUP and REDER) 221

E

Egg:
Albumin, crystallized (CALVERY) 613
Vitellin (CALVERY and WHITE) 635
Elasmobranch:
Tissues, phosphatase (BODANSKY, BAKWIN, and BAKWIN) 551
Electrolytes:
Ultrafiltration, alkali caseinate solutions (GREENBERG and GREENBERG) 373
Energy:
Requirements, irradiated milk, antirachitic activation (SUPPLEE, DORCAS, and HESS) 749
Enzyme:
Hydrolysis, methionine isolation (DU VIGNEAUD and MEYER) 641
See also Antiurease, Carotenase, Esterase, Phosphatase.

Ephinephrine:
Hexosephosphate, muscle, effect (Cori and Cori) 581
Muscle hexosephosphate, effect (Cori and Cori) 581
Ergosterol:
Irradiated, hypercalcemia, calcium source (Hess, Benjamin, and Gross) 1
—, muscle, striated, phosphorus distribution, influence (Cole and Koch) 263
—, phosphorus distribution, muscle, striated, influence (Cole and Koch) 263
Yeast. II (Massengale, Bills, and Prickett) 213
—, carbohydrate sources (Massengale, Bills, and Prickett) 213
Erythrocyte:
See Blood cell, red.
Esterase:
Liver, inhibition, and alcohols, aliphatic, saturated, chemical constitution, relation (Glick and King) 497
Ethylbenzylcarbinol:
Carbinols, aliphatic, simple, configurational relationship (Levene and Walti) 367

F

Fat:
Acetone-soluble, tubercle bacillus, bovine (Burt and Anderson) 451
Fat—*continued:*
Digestibility, gossypol effect (Gallup and Reder) 221
Feeding:
Amino acids, purified. I (Rose) 155
II (Ellis and Rose) 167
III (Windus, Catherwood, and Rose) 173
Ferricyanide:
Oxidation, unsaturated compounds, catalyst (Wright, Conant, and Kamerling) 411
Frog:
Muscle, ammonia determination, micro (Embden) 315
Rana pipiens, muscle, carbohydrates (Sahyun) 29

G

Galactose:
Blood, determination (Harding and Grant) 529
Determination, blood (Harding and Grant) 529
—, urine (Harding and Grant) 529
Urine, determination (Harding and Grant) 529
***d*-Galacturonic acid:**
Preparation (Link and Nedden) 307
Glucose:
Absorption, gastrointestinal tract, gossypol effect (Gallup and Reder) 221

d-Glucose:
Oxidation, catalytic (DEGERING and UPSON) 423
Glutamic acid:
Synthesis (DUNN, SMART, REDEMANN, and BROWN) 599
Glutathione:
Insulin, crystalline, inactivation (DU VIGNEAUD, FITCH, PEKAREK, and LOCKWOOD) 233
Glycols:
Chemical constitution, from reduction with fermenting yeast (LEVENE and WALTI) 361
Glycosuria:
Phlorhizin, metabolism, thyroidectomy effect (DANN, CHAMBERS, and LUSK) 511
Goiter:
Involution, mineral metabolism (BAUMANN, KURLAND, and METZGER) 383
Gossypol:
Carbohydrate digestibility, effect (GALLUP and REDER) 221
Fat digestibility, effect (GALLUP and REDER) 221
Glucose absorption, gastrointestinal tract, effect (GALLUP and REDER) 221
Protein digestibility, effect (GALLUP and REDER) 221
Toxicity. II (GALLUP and REDER) 221
Growth:
Anemia, nutritional, inorganic elements effect (BEARD) 135
Promoting ability, *dl*-tryptophane (BERG and POTGIETER) 661

H

Hemicellulose:
II (ANDERSON and KINSMAN) 39
Cottonseed hulls (ANDERSON and KINSMAN) 39
Hemoglobin:
Anemia, nutritional, iron plus supplements, action (BEARD, BAKER, and MYERS) 123
Hemoglobinemia:
Inorganic elements, production (MYERS, BEARD, and BARNES) 117
Heptanoic acid:
α-Hydroxy-, α-hydroxy acids, configurational relationship (LEVENE and WALTI) 593
Hexosemonophosphate:
Determination, muscle (CORI and CORI) 561
Muscle, determination (CORI and CORI) 561
Hexosephosphate:
Muscle, epinephrine effect (CORI and CORI) 581
—, insulin effect (CORI and CORI) 581
α-Hydroxy acids:
α-Hydroxyheptanoic acid, configurational relationship (LEVENE and WALTI) 593

α-Hydroxyaldehydes:
Polymerization (Levene and Walti) 353
α-Hydroxyheptanoic acid:
α-Hydroxy acids, configurational relationship (Levene and Walti) 593
Hypercalcemia:
Ergosterol, irradiated, calcium source (Hess, Benjamin, and Gross) 1

I

Infant:
New born, tibia, calcification (Booher and Hansmann) 195
Inorganic elements:
Anemia, nutritional, blood regeneration, effect (Beard) 135
—, —, — —, iron supplement, effect (Myers and Beard) 89
—, —, growth effect (Beard) 135
—, —, prevention (Beard, Rafferty, and Myers) 111
Hemoglobinemia production (Myers, Beard, and Barnes) 117
Polycythemia production (Myers, Beard, and Barnes) 117
Insulin:
Crystalline, inactivation, cysteine (du Vigneaud, Fitch, Pekarek, and Lockwood) 233
Insulin—*continued:*
Crystalline, inactivation, glutathione (du Vigneaud, Fitch, Pekarek, and Lockwood) 233
Hexosephosphate, muscle, effect (Cori and Cori) 581
Muscle hexosephosphate, effect (Cori and Cori) 581
Iodine number:
Determination, lipids (Yasuda) 461
Iron:
Anemia, nutritional, blood regeneration, effect (Beard and Myers) 71
—, —, — —, inorganic elements supplement effect (Myers and Beard) 89
—, —, erythrocyte, action (Beard, Baker, and Myers) 123
—, —, hemoglobin, action (Beard, Baker, and Myers) 123
—, —, reticulocyte, action (Beard, Baker, and Myers) 123
Systems, oxidation rate and potential, correlation (Michaelis and Smythe) 329
—, potential and oxidation rate, correlation (Michaelis and Smythe) 329
Iron pyrophosphates:
Oxidations, *d*-glucose and related sugars, catalyst (Degering and Upson) 423

Irradiation:
Ergosterol, hypercalcemia, calcium source (HESS, BENJAMIN, and GROSS) 1
—, muscle, striated, phosphorus distribution, influence (COLE and KOCH) 263
—, phosphorus distribution, muscle, striated, influence (COLE and KOCH) 263
Milk, antirachitic activation, energy requirements (SUPPLEE, DORCAS, and HESS) 749

Isobutylcarbinols:
Carbinol, ethylbenzyl-, configurational relationship (LEVENE and WALTI) 367
Carbinols, aliphatic, simple, configurational relationship (LEVENE and WALTI) 367

K

Keratin:
Neurokeratin, relation (BLOCK) 647

L

Lactic acid:
Blood, determination, gasometric (AVERY and HASTINGS) 273
Determination, gasometric, blood (AVERY and HASTINGS) 273

Lemon:
Juice, vitamin C concentrates, preparation (SVIRBELY and KING) 483

Lemon—*continued:*
(SMITH and KING) 491
Juice, vitamin C concentrates, storage (SMITH and KING) 491

Leprosy:
Bacillus, lipoids, separation (UYEI and ANDERSON) 653

Lipids:
Iodine number, determination (YASUDA) 401

Lipoids:
Leprosy bacillus, separation (UYEI and ANDERSON) 653
Tubercle bacillus, chemistry. XXIV (BURT and ANDERSON) 451
XXV (PANGBORN and ANDERSON) 465
XXVI (UYEI and ANDERSON) 653

Lithium pyruvate:
Preparation (WENDEL) 717

Liver:
Acid in, crystalline derivative (WEST and HOWE) 611
Esterase, inhibition, and alcohols, aliphatic, saturated, chemical constitution, relation (GLICK and KING) 497

M

Macrocystis pyrifera:
Carbohydrate acid sulfate (NELSON and CRETCHER) 147

Manganese:
Milk, diet effect (KEMMERER and TODD) 317
Mercuric salts:
Cystine, action (SIMONSEN) 323
Metabolism:
Amino acid. I (KIECH and LUCK) 433
Creatine-creatinine, amino acid effect (BEARD and BARNES) 49
—, protein effect (BEARD and BARNES) 49
Mineral, goiter involution (BAUMANN, KURLAND, and METZGER) 383
Phlorhizin glycosuria, thyroidectomy effect (DANN, CHAMBERS, and LUSK) 511
Sulfur. XVIII (LOUGH and LEWIS) 739
Tryptophane. II (BERG and POTGIETER) 661
Metaphysis:
Ash (HESS, BERLINER, and WEINSTOCK) 9
Methionine:
Isolation, enzyme hydrolysis (DU VIGNEAUD and MEYER) 641
Milk:
Irradiation, antirachitic activation, energy requirements (SUPPLEE, DORCAS, and HESS) 749
Manganese, diet effect (KEMMERER and TODD) 317
Mineral:
Metabolism, goiter involution (BAUMANN, KURLAND, and METZGER) 383
Monobromobenzene:
Urine sulfur distribution, effect (LOUGH and LEWIS) 739
Muscle:
Ammonia determination, micro, frog (EMBDEN) 315
Carbohydrates (SAHYUN) 253
—, frog (SAHYUN) 29
Hexosemonophosphate determination (CORI and CORI) 561
Hexosephosphate, epinephrine effect (CORI and CORI) 581
—, insulin effect (CORI and CORI) 581
Striated, phosphorus distribution, age influence (COLE and KOCH) 263
—, — —, diet influence (COLE and KOCH) 263
—, — —, ergosterol, irradiated, influence (COLE and KOCH) 263

N

Neuritis:
Antineuritic concentrates, potency testing (FREUDENBERG and CERECEDO) 207

Neuritis—*continued:*
Antineuritic vitamin. I (Freudenberg and Cerecedo) 207
I (Block, Cowgill, and Klotz) 765
— —, assay method (Block, Cowgill, and Klotz) 765
— —, concentration with silver (Block, Cowgill, and Klotz) 765
— —, solubility (Block, Cowgill, and Klotz) 765
Neurokeratin:
Amino acids, basic (Block) 647
Keratin, true, relation (Block) 647
Nitrogen:
Amide, blood protein, urine ammonia source (Nash and Williams) 783
Nutrition:
Acid-base balance. IV (Lamb and Evvard) 415

O

Obituary:
Van Slyke, Lucius Lincoln, preceding p. 329
Ornithine:
Crystalline, preparation (Vickery and Cook) 393
Monosulfates, preparation (Vickery and Cook) 393
Picrates, preparation (Vickery and Cook) 393
Oxidation:
d-Glucose, catalytic (Degering and Upson) 423
Rate, iron systems, potential and, correlation (Michaelis and Smythe) 329
Sugars, *d*-glucose-related, catalytic (Degering and Upson) 423
Unsaturated compounds, ferricyanide as catalyst (Wright, Conant, and Kamerling) 411

P

Phlorhizin:
Glycosuria, metabolism, thyroidectomy effect (Dann, Chambers, and Lusk) 511
Phosphatase:
Elasmobranch tissues (Bodansky, Bakwin, and Bakwin) 551
Teleost tissues (Bodansky, Bakwin, and Bakwin) 551
Phosphate:
Inorganic, blood serum, diet influence (Dupré and Semeonoff) 341
—, — —, diurnal variation (Dupré and Semeonoff) 341
Phosphatide:
Timothy bacillus (Pangborn and Anderson) 465
Phosphorus:
Muscle, striated, distribution, age influence (Cole and Koch) 263

Phosphorus—*continued:*
Muscle, striated, distribution, diet influence (Cole and Koch) 263
—, —, —, ergosterol, irradiated, influence (Cole and Koch) 263
Pipette:
Blood, Van Slyke gasometric apparatus (Guest) 507
Plant:
Coloring matter, robinin (Sando) 675
Polycythemia:
Inorganic elements, production (Myers, Beard, and Barnes) 117
Polymerization:
Condensation and. VII (Levene and Walti) 353
Potential:
Iron systems, oxidation rate and, correlation (Michaelis and Smythe) 329
Protein(s):
Amide nitrogen, blood, urine ammonia source (Nash and Williams) 783
Amino acids, diet inadequacy, supplement (Ellis and Rose) 167
Creatine-creatinine metabolism, effect (Beard and Barnes) 49
Digestibility, gossypol effect (Gallup and Reder) 221
Pyruvic acid:
Determination (Wendel) 717

R

Rana pipiens:
See Frog.
Reduction:
Glycols, yeast, fermenting, configurations (Levene and Walti) 361
Phytochemical (Levene and Walti) 361
Reproduction:
Acid ingestion effect (Lamb and Evvard) 415
Reticulocyte:
Anemia, nutritional, iron plus supplements, action (Beard, Baker, and Myers) 123
Rickets:
Antirachitic activation, milk, irradiated, energy requirements (Supplee, Dorcas, and Hess) 749
Robinin:
Plant coloring matter (Sando) 675

S

Skeleton:
Composition. I (Booher and Hansmann) 195
Sugar(s):
Acidic property (Urban and Shaffer) 697
Blood, nature (Power and Greene) 295
—, state (Power and Greene) 281

Sugar(s)—*continued:*
d-Glucose-related, oxidation, catalytic (DEGERING and UPSON) 423
Sulfur:
Metabolism. XVIII (LOUGH and LEWIS) 739
Urine, distribution, monobromobenzene effect (LOUGH and LEWIS) 739

T

Teleost:
Tissues, phosphatase (BODANSKY, BAKWIN, and BAKWIN) 551
Thyroidectomy:
Phlorhizin glycosuria, metabolism effect (DANN, CHAMBERS, and LUSK) 511
Tibia:
Calcification, new-born (BOOHER and HANSMANN) 195
Timothy bacillus:
Phosphatide fraction (PANGBORN and ANDERSON) 465
Tissue:
Elasmobranchs, phosphatase (BODANSKY, BAKWIN, and BAKWIN) 551
Teleosts, phosphatase (BODANSKY, BAKWIN, and BAKWIN) 551
Toxicity:
Gossypol. II (GALLUP and REDER) 221
Tryptophane:
Metabolism. II (BERG and POTGIETER) 661
dl-**Tryptophane:**
Growth-promoting ability (BERG and POTGIETER) 661
Tubercle bacillus:
Bovine, fat, acetone-soluble (BURT and ANDERSON) 451
Chemistry. XXIV (BURT and ANDERSON) 451
XXV (PANGBORN and ANDERSON) 465
XXVI (UYEI and ANDERSON) 653

U

Ultrafiltration:
I (GREENBERG and GREENBERG) 373
Electrolytes, alkali caseinate solutions (GREENBERG and GREENBERG) 373
Urea:
Formation, amino acid disappearance, relative rates (KIECH and LUCK) 433
Urease:
Anti- (KIRK and SUMNER) 21
Urine:
Ammonia, blood protein amide nitrogen source (NASH and WILLIAMS) 783
Bromide injection effect (HASTINGS, HARKINS, and LIU) 681
Galactose determination (HARDING and GRANT) 529

Urine—*continued:*
Sulfur distribution, monobromobenzene effect (LOUGH and LEWIS) 739

V

Van Slyke:
Gasometric apparatus, blood pipette (GUEST) 507

Van Slyke, Lucius Lincoln:
Obituary, preceding p. 329

Vitamin(s):
A, carotene transformation *in vitro* (OLCOTT and MCCANN) 185
Antineuritic. I (FREUDENBERG and CERECEDO) 207
I (BLOCK, COWGILL, and KLOTZ) 765
—, assay method (BLOCK, COWGILL, and KLOTZ) 765
— concentrates, potency testing (FREUDENBERG and CERECEDO) 207
Vitamin(s)—*continued:*
Antineuritic, concentration with silver (BLOCK, COWGILL, and KLOTZ) 765
—, solubility (BLOCK, COWGILL, and KLOTZ) 765
C concentrates, preparation, lemon juice (SMITH and KING) 491
(SVIRBELY and KING) 483
— —, storage, lemon juice (SMITH and KING) 491

Vitellin:
Egg (CALVERY and WHITE) 635

Y

Yeast:
Ergosterol. II (MASSENGALE, BILLS, and PRICKETT) 213
—, carbohydrate sources (MASSENGALE, BILLS, and PRICKETT) 213
Fermenting, glycols reduced by, configurations (LEVENE and WALTI) 361

3753